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Examiner: Kyung H. Shin

AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1(Previously Presented). A data link layer processor comprising:

a plurality of media access controllers, wherein each media access controller is operatively coupled to a physical layer interface; and characterized such that a traffic shaper is operatively coupled to said media access controllers for discarding one or more frames from a network processor that exceed one or more bandwidth parameters prior to transmission to the media access controllers.

2 (Previously Presented). A switching device comprising:

a plurality of physical layer interfaces for transmitting frames to a communication network;

a network processor for routing the frames towards the physical layer interfaces;
and

a traffic shaper;

characterized by a plurality of network access modules, wherein each of said network access modules comprises a data link layer processor, wherein each data link layer processor comprises: a plurality of media access controllers, wherein each media access controller is operatively coupled to a physical layer interface; and characterized in that said traffic shaper is operatively coupled to said media access controllers, for discarding one or more frames from the network processor that exceed one or more bandwidth parameters prior to transmission to the media access controllers.

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3 (Currently Amended). The switching device of claim 2, wherein the traffic shaper discards the one or more frames in accordance with a Three Color Marker (TCM) algorithm and wherein each media access controller is operatively coupled to a separate physical layer interface.

4 (Original). The switching device of claim 3, wherein the TCM algorithm is selected from the group consisting of: single rate TCM, two rate TCM, and a combination thereof.

5 (Previously Presented). The switching device of claim 2, wherein the traffic shaper comprises:

- a meter module for determining a flow rate associated with the frames received from the network processor; and
- a discard control logic for selectively discarding said one or more frames based upon the flow rate and the one or more bandwidth parameters.

6 (Previously Presented). The switching device of claim 5, wherein the traffic shaper further comprises a marker module for marking the plurality of frames in accordance with a TCM algorithm.

7 (Original). The switching device of claim 6, wherein the one or more bandwidth parameters comprise a committed information rate (CIR) and an excess burst size (EBS).

8 (Original). The switching device of claim 2, wherein the traffic shaper comprises a flow search engine for classifying frames from the network processor based upon one or more properties associated with the frames.

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9 (Original). The switching device of claim 8, wherein the flow search engine comprises a content addressable memory (CAM).

10 (Previously Presented). The switching device of claim 9, wherein the CAM associated with each of the plurality of data link layer processors consists of QoS rules pertaining to the associated plurality of physical layer interfaces.

11 (Original). The switching device of claim 2, wherein data link layer processors are media access controller (MAC) processors.

12 (Original). The switching device of claim 2, wherein the switching device is selected from the group consisting of: a router, a multi-layer switching device, and a switch blade.